Notice of Allowability	Application No.	Applicant(s)
	10/669,274	FLOLO, DENNIS P.
	Examiner	Art Unit
	Brian D. Walsh	3722
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>9/24/03</u> .		
2. The allowed claim(s) is/are <u>1-22</u> .		
3. ☑ The drawings filed on <u>24 September 2003</u> are accepted by the Examiner.		
<ul> <li>4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No.</li> <li>Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* Certified copies not received:</li> </ul>		
Applicant has THREE MONTHS EROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
<ul> <li>6. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> </ul>		
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Summary Paper No./Mail Dat 8), 7. ☐ Examiner's Amendm	e

Application/Control Number: 10/669,274

Art Unit: 3722

## ALLOWANCE

## Allowable Subject Matter

- 1. Claims 1 22 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: the following reasons for allowance are directed to independent claims 1, 12 and 19.

The Examiner considered Applicant's amendment as well as Applicant's arguments.

Applicant has amended each of the above claims to include a limitation that limits the cutting edge to a curved path in a place substantially parallel to the centerline of rotation of the cutting tool body. Applicant has also amended each independent claim to indicate that each crest at the curved cutting edge is spaced farther from the centerline of rotation than the adjacent face root.

The limitation pertaining to the cutting edge being in a plane parallel to the centerline overcomes the previous 102(b) rejection by Vogel et al. (U.S. Pat. No. 5,772,365). The Examiner maintains that Vogel et al. remains the most relevant example in the prior art. It is clear that Vogel et al. discloses a curved cutting edge that follows a curved path oriented to follow a "sphere" at the end of the cutting tool and is not in a plane parallel to the axis of the tool (issue raised by Applicant). Not only does Vogel et al. not show this feature, but due to the unique orientation of the insert with respect to the tool body, modification of Vogel et al. to achieve this feature would require considerable hindsight reconstruction and most likely destroy the workability of the tool for its intended use.

After this determination the Examiner considered other relevant examples known in the prior art. As far as reaching the claimed limitation of the cutting edge plane being substantially parallel with the tool axis, previously cited reference Krenzer (U.S. Pat. No. 5,967,710) most

Application/Control Number: 10/669,274

Art Unit: 3722

closely achieves this requirement. However, various illustrations of Krenzer clearly show that the cutting edge is in a "ramped" or sloping relationship with the tool axis. This failure by Krenzer is most clearly shown in figure 3 of '710. Since the Examiner was unable to reconstruct the claimed invention in a reasonable or obvious manner, it is determined that the above elements were not disclosed nor rendered obvious by the prior art.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Faxing of Responses to Office Actions

4. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to all Office Actions directly into the Group at (703) 872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the Examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Walsh whose telephone number is (703) 605-0638. The examiner can normally be reached on Monday - Friday 8:30 A.M. to 6:00 P.M., with every-other Friday off.

Application/Control Number: 10/669,274 Page 4

Art Unit: 3722

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

June 13, 2004

**TECHNOLOGY CENTER 3700**